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RESULTS OF THE 1989-90 UTAH SKI INDUSTRY STUDY

Boyd L. Fjeldsted
Senior Research Economist

Frank C. Hachman
Associate Director

Introduction

This article presents highlights from a comprehensive study of the Utah ski industry sponsored by the Utah Ski Association, the Utah Travel Council, the Salt Lake Convention and Visitors Bureau and the Park City Area Chamber/Visitors and Convention Bureau. The study was begun by the Bureau of Economic and Business Research (BEBR) of the University of Utah in December of 1989 and consisted of two principal components: (1) a stratified sample survey of more than 1,400 Utah skiers conducted at all 14 Utah ski areas throughout the 1989-90 ski season and (2) an analysis of the impact of the Utah ski industry on the Utah economy, based in part on the results of the Utah skier survey, but supplemented with information developed from other sources.

The first part of this article presents the basic results of the Utah skier survey, which was focused to a considerable extent on the market behavior and economic and demographic characteristics of non-resident skiers, though certain behavioral aspects and economic and demographic characteristics of Utah resident skiers were probed as well. The second part of this article sets forth the results of an analysis of the impact of non-resident skiers on the Utah economy, together with an economic profile of the Utah ski industry as a whole.

In reading this article it should be kept in mind that a skier visit (or skier day) is defined as one person visiting a ski area for all or any part of a day for the purpose of skiing. From this definition, it follows that the total number of skier visits to a ski area on a given day will be equal to the total number of lift tickets issued plus the number of visits by season pass holders. Since many non-resident skiers do not ski every day during their visit to Utah, the total number of Utah visitor days accounted for by non-resident skiers during their stay in Utah will exceed their total number of skier visits.

PART I. THE 1989-90 UTAH SKIER SURVEY

Sample Design and Intercept Procedure

One of the principal goals of the 1989-90 skier survey was to estimate the proportion of total Utah skier visits accounted for by non-resident skiers with a maximum error margin of approximately 2.5 percentage points at the 95% confidence level. In order to achieve this objective, the skier survey incorporated a two-stage stratified sample design, with the total sample size of approximately 1,400 completed interviews allocated among ski areas in approximate proportion to the number of skier visits accounted for by each ski area. At the second stage the sample was temporally apportioned within each ski area in approximate proportion to skier activity accounted for on different days of the week, with special consideration given to increased activity occurring during holiday periods.

In addition, a cluster design was adopted for the purpose of cost effectiveness. Each interviewer was assigned to a ski area for either a full day or a half day, depending on the location of the ski area and the number of interviews required from the ski area for the week. Typically the cluster size was 5 or 6 completed interviews for a half-day assignment and 10 or 12 interviews for a full-day assignment. Interviews were restricted to skiers age 16 and over who were not ski area employees.

In order to achieve an acceptable response rate, intercepts took place in lift lines, with the interview usually being completed during the lift ride after the intercept. On some occasions it was possible to complete the interview in the lift line. On relatively few occasions it was necessary to complete the interview upon departing the chair lift at the top of the lift. It is worth noting at this point that the lift line intercept procedure resulted in a response rate of almost 95%, i.e., among those intercepted skiers who were eligible for inclusion in the sample only slightly more than 5% refused to be interviewed.

The sample design was self-weighting, in the sense that the sample allocation among ski areas was approximately proportional to the share of skier visits expected from each ski area on the basis of past experience. In order to generate unbiased estimates of state-wide parameters, the inference process was further refined by weighting estimates from each ski area by their actual share of skier visits during the 1989-90 ski season. In addition, for non-resident skiers, unbiased estimates of those parameters expressed on a per skier basis (rather than on a per skier visit basis) were obtained by weighting individual observations by the reciprocal of the reported number of days skied in Utah. This procedure compensates for the fact that the probability of including a particular type of non-resident skier in the sample is directly proportional to the average number of days skied in Utah by that type of skier.

In the discussion that follows, the term "respondent" or simply "skier" is used to refer to a person who answered a particular question on the survey questionnaire. If a person declined to answer a particular question, that person was not considered to be a respondent for the purpose of tabulating the results for that question.

Highlights of the Skier Survey

- Non-resident skiers accounted for 60% of total Utah skier visits for the 1989-90 ski season after weighting the results from individual ski areas by the proportion of total skier activity accounted for by each ski area.

- California alone accounted for 25% of the non-resident skier respondents, with 20% coming from other western and southwestern states, 24% coming from northeastern and central Atlantic states, and 26% from southern and central states. About 5% came from foreign countries.

- Approximately 36% of non-resident respondents were skiing in Utah for the first time; among those who were not skiing in Utah for the first time, the average number of years skied in the previous 5 years was 2.5, though 26% of these had skied in Utah every year in the previous 5 years.

- Approximately 82% of non-resident skiers listed skiing or vacation as the principal reason for being in Utah. Business and/or convention was the reason listed by 7.5%, followed by visiting family or friends at 5.8%.

- Of the non-resident skiers listing skiing as the main reason for the trip, 27.2% selected Utah

because of the snow or skiing conditions, 10.7% so they could visit family or friends, 8.4% because they owned a condo or an interest in a condo, 8.1% because of past favorable experience, and 7.8% because of accessibility of the ski areas.

- Approximately 35% of non-resident skiers visited or intended to visit downtown Salt Lake City during their stay in Utah, while 43% visited or intended to visit downtown Park City. Some 15% were going to visit Temple Square, while 23% were going to visit night clubs. About 5% intended to attend professional basketball or hockey games, while 2% were going to attend the symphony, ballet or opera. About 5% planned to go snowmobiling, with just over 2.5% planning to go cross-country skiing.

- About 55% of non-resident skiers staying in the Salt Lake Valley visited or intended to visit downtown Salt Lake City, while only about 23% of those staying in Park City visited or intended to visit downtown Salt Lake. About 77% of non-resident skiers staying in Summit County visited or intended to visit downtown Park City, while less than 24% of those staying in the Salt Lake Valley visited or intended to visit downtown Park City.

- Non-resident skiers stayed an average of 5.4 nights in Utah and skied an average of 4.2 days on Utah ski slopes. These averages were calculated using appropriate weights to adjust for differential intercept probabilities. This is necessary since those non-resident skiers with long stays have a higher probability of being included in the sample than those with short stays.

- The average length of stay of non-resident skiers staying in the Salt Lake Valley was 5.4 nights, compared to 5.7 nights for those staying in Summit County. Perhaps more interesting is the fact that the average number of days skied by those staying in Salt Lake County was 3.8, while the average number of days skied by those staying in Summit County was a full day longer, viz., 4.8. Again appropriate weights were used in the calculation of these averages to adjust for differential intercept probabilities.

- Park City (including Deer Valley) was the primary lodging area for almost 38% of non-resident skiers. Other Summit County areas accounted for more than 1%, so that the total for Summit County was over 39%. Park City was followed by downtown Salt Lake, with 23% of the non-resident skiers. Other Salt Lake Valley areas, such as Sandy, Midvale and Murray, accounted for nearly 13%, so that the total for the Salt Lake Valley was 36%. In addition Snowbird and Alta, also in Salt Lake County, accounted for about 11%, so that the total for Salt Lake County was approximately 47%.

- More than 32% of non-resident skiers stayed in a rented condo or vacation home while in their primary lodging area. Almost 14% stayed in a resort hotel, while 30% stayed in some other hotel or motel for a total of almost 44% in hotels and motels. More than 13% stayed with friends or family, while almost 9% stayed in an owned condo or vacation home.

- Approximately 76% of non-resident skiers traveled to Utah by airline. Of these a weighted proportion of about 15% paid no fare, either because they were participating in a frequent flyer program or were airline employees. The appropriately weighted round-trip airfare for those purchasing tickets was approximately $360. Inclusion of those paying no fare reduced the average for all trips to approximately $305. More than 22% of non-resident skiers traveled to Utah by automobile or other private vehicle, with just under 2% traveling by bus. Another 1% traveled by private aircraft.

- About 76% of non-resident skiers staying in the Salt Lake Valley traveled to Utah by airline, while almost 90% of those staying in Summit County traveled to Utah by airline. The other side of the travel picture is that almost 20% of those staying in the Salt Lake Valley traveled to Utah by automobile, compared to only about 8% of those staying in Summit County.

- Slightly more than 48% of the non-resident skiers made use of a travel agent for their trip to Utah, while some 19% of the non-resident

skiers purchased a tour package that included lodging.

- Some 32% of non-resident skiers used a private automobile some time during their stay in Utah. More than 44% used a rented automobile, while less than 2% used a taxi. Approximately 7% used the Utah Transit Authority, while some 11% used the Park City Shuttle. About 16% used some other form of ground transportation.

- Approximately 71% of the non-resident skiers indicated they were influenced by friends or family in making their decision to ski in Utah for the first time. About 15% stated that they were influenced by ski magazine advertisements, while 3% declared that they were influenced by some other kind of magazine advertisement. About 8% were influenced by ski or travel magazine articles, while 1% were influenced by newspaper articles and approximately 2% were influenced by TV news or other TV coverage. Somewhat less than 3% said they were influenced by travel agent recommendations.

- Some 14% of non-residents had used the Utah Ski Planner in planning their trip to Utah. More than 24% had used the Salt Lake City Visitor Guide or the Park City Vacation Planner either in planning their trip or during their visit to Utah.

- The average size of group of non-residents traveling together to Utah (including single persons) was 2.4. The average number of skiers in the group was 2.2, implying that the average number of non-skiers in the group was only 0.2 of a person. The average number of skiers under the age of 16 in the group was 0.5. These averages were calculated using appropriate weights to compensate for differential intercept probabilities for skiers from large groups as opposed to skiers from small groups.

- For those groups staying in the Salt Lake Valley the average group size was 2.0, including 1.9 skiers (of whom 0.4 were under the age of 16). For groups staying in Summit County the average group size was 2.9, including 2.8 skiers (of whom 0.6 were under the age of 16). Again these averages were calculated using appropriate weights to compensate for differential intercept probabilities.

- On a scale of 1 to 5 the average rating given Utah skiing by all respondents, both resident and non-resident, was 4.7. More than 72% gave Utah the highest possible rating of 5.

- Approximately 67% of respondents, both resident and non-resident, who expressed either a like or a dislike about Utah or Utah's skiing mentioned snow and skiing conditions as being among the things they liked best. About 23% mentioned Utah's terrain variety as one of the things they liked best. And about 21% listed the accessibility of Utah's ski areas as one of the things they liked best about Utah or Utah's skiing.

- Approximately 24% of respondents, both resident and non-resident, who expressed either a like or a dislike about Utah or Utah's skiing mentioned Utah's liquor laws as being among the things they disliked most, while some 20% alluded to crowded lifts or slow lifts. Only 16% of non-residents mentioned crowded lifts or slow lift lines, compared to 26% of residents. About 12% listed high prices as being among the things they disliked most about Utah or Utah's skiing. Only 9% of non-residents mentioned high prices, compared to 16% of residents.

- Only persons 16 years of age or older were included in the sample. The average age of respondents within this restricted age group was 34.6. The average age at which they learned to ski was 18.7. Approximately 6% were taking ski lessons at the time of their visit.

- About 6% of all respondents had not graduated from high school. High school graduation was the highest education level for 11%, some college was the highest education level for 26%, college graduation was the highest level for 32% and graduate work was the highest education level for 25%.

- The average household size for all respondents was 2.9, with an average of 1.0 dependent

children. The mean household income of all respondents was almost $70,000, with the mean household income of Utah resident skiers being $40,100 and the mean household income of non-resident skiers being $97,500. Less than half of 1% of resident skiers had household incomes greater than $200,000, while 15% of non-resident skiers claimed to have household incomes greater than $200,000.

- About 23% of non-resident skiers staying in the Salt Lake Valley stayed with family or friends, compared to only 6% of those staying in Summit County. This may be related to the fact more than 26% of those staying in the Salt Lake Valley reported a household incomes of less than $40,000, compared to only 13% of those staying in Summit County. Or perhaps to the fact that nearly 40% of the non-resident skiers staying in Summit County reported a household income of more than $100,000, compared to only 21% for those staying in the Salt Lake Valley.

PART II. ECONOMIC SIGNIFICANCE OF THE UTAH SKI INDUSTRY

Profile of the Utah Ski Industry

There are various ways of defining the Utah ski industry, including the broad notion of including every business enterprise in Utah that sells (or rents) ski equipment, ski apparel, access to ski runs, ski instruction, and food and lodging to skiers while they are visiting a ski area, and other non-skiing items to non-resident skiers while they are in Utah for the purpose of skiing. This definition could be enlarged to include businesses that sell skiing-related equipment or services to firms that sell to skiers. But the heart of any definition would have to include the 14 ski areas that provide access to Utah's renowned ski runs.

These ski areas range from Beaver Mountain in the north to Elk Meadows and Brian Head in southern Utah. In between are the Ogden Valley ski areas: Nordic Valley, Powder Mountain and Snow Basin; the Summit County ski areas: Deer Valley, Park City and ParkWest; the Salt Lake County ski areas: Alta, Brighton, Solitude and Snowbird; and the Utah County ski area: Sundance. These 14 ski areas provide a tremendous variety, not only with respect to geography, scenery and terrain, but also with respect to the types of skiing experiences to be had.

As part of this study the Bureau of Economic and Business Research conducted a financial survey of the 14 Utah ski areas in order to be able to characterize their direct sales to skiers and their direct purchases from Utah vendors. Since the 1989-90 ski season was not yet over with when the survey began, the ski areas were requested to provide information for the 1988-89 ski season. All but one of the ski areas elected to participate in the survey, though not all of the 13 remaining ski areas provided information on every item requested in the survey. However, on the basis of other information, BEBR was able to impute values for the missing ski area and for the missing items.

The results of the survey aggregated over all ski areas for the 1988-89 ski season may be summarized as follows: lift pass revenue, $44.9 million; equipment rental revenue, $2.1 million; ski school revenue, $7.6 million; food and beverage revenue, $20.0 million; lodging revenue, $12.2 million; and other revenue, $7.4 million. With respect to purchases from Utah sources, the 14 Utah ski areas showed the following: labor costs, $31.4 million; electric power, $3.9 million; natural gas, $0.8 million; other fuels, $1.2 million; insurance, $3.0 million; advertising, $3.0 million; food and beverages, $6.9 million; engineering and construction, $5.8 million; and other Utah purchases, $7.8 million. These numbers show a significant direct impact on other sectors of the Utah economy by the Utah ski industry.

Taken altogether these aggregate revenue numbers and aggregate Utah purchases numbers provide a fairly accurate portrayal of that segment of the industry that provides access to the ski slopes. But the ski areas constitute only a part of the total Utah ski industry picture. Moreover, except in the categories of lift passes and ski instruction, skier purchases from other Utah businesses far exceed the purchases made from the ski areas themselves.

In addition to the ski areas there are more than 500 other Utah business firms that have been identified as making significant sales to skiers for the purpose of facilitating or enhancing the skiing experience. An attempt was made to survey these

businesses in order to come up with an estimate of total expenditures in Utah of skiers made for the purpose of skiing. However, the response rate on this survey was so low (only about 15%) that it was not considered worthwhile to report the results of the survey. Obviously, though, the ski areas themselves constitute only part of the Utah ski industry picture.

Export Base Analysis and the Utah Ski Industry

For the purpose of this article the actual measurement of the total economic impact of the Utah ski industry (including indirect and induced effects) will be limited to the impact of non-resident skier expenditures on the Utah economy as estimated from the results of the 1989-90 Utah skier survey. Actually though, there is a very sound economic reason for focusing on the impact of non-resident expenditures, since there is a significant distinction to be made between the effects of spending by resident and non-resident skiers. In terms of regional export base analysis visiting out-of-state skiers constitute a portion of Utah's export base. The economic effect of their expenditures in Utah is similar to the effect of a Utah manufacturing firm exporting integrated circuits to New Jersey or a mining firm exporting ore to California. In each case the export activity results in new dollars being injected into the Utah economy, with a consequent multiplier effect on the earnings and employment of Utah workers.

On the other hand, the Utah skiing industry should be given credit for the extent to which Utah residents would be skiing in other states, except for the existence of Utah skiing with all of its desirable attributes. In terms of regional export base analysis this phenomenon is referred to as import substitution. Unfortunately, the extent to which Utah resident skiers are substituting Utah skiing for out-of-state skiing is not easily determinable. For this reason the study has concentrated on the economic impact of non-resident skiers, though the economic surplus enjoyed by Utah residents by virtue of the existence of the Utah ski industry with all of its present amenities, is, no doubt, very substantial. This much can be inferred from the ratings of Utah skiing and the laudatory comments expressed by Utah resident skiers in the 1989-90 skier survey.

Non-resident Skier Economic Impact Highlights

- Non-resident skiers accounted for 60 percent or approximately 1.5 million of the 2.5 million skier visits to Utah ski areas during the 1989-90 ski season, with an average estimated expenditure during their entire stay in Utah of approximately $145 per person per day.

- Non-resident skiers accounted for more than 250,000 round-trip airline flights to Utah with an average round-trip fare of approximately $360 for paid tickets. Approximately 15% of the total trips were made under frequent flyer programs or by airline employees, resulting in an average fare for all trips of approximately $305.

- These out-of-state skiers spent approximately $340 million for their Utah skiing vacations, including an estimated $80 million for travel to Utah and an estimated $260 million while staying in Utah.

- The $260 million spent in Utah included an estimated $34.5 million for lift passes; $6.5 million for ski equipment rentals; $6.7 million for ski lessons; $91.2 million for lodging; $45.0 million for restaurant meals; $17.2 million for other food and beverages; $18.3 million for ski equipment and apparel; $4.8 million for other apparel and footwear; $11.3 million for jewelry, souvenirs, gifts and other retail purchases; $1.9 million for entertainment and amusement other than skiing; $13.1 million for automobile rental; $3.9 million for gasoline and automobile maintenance; and $6.6 million for other transportation costs, other services and other miscellaneous expenditures.

- Direct Utah excise tax collections attributable to non-resident skier expenditures in Utah (including sales tax, room tax, and gasoline tax collections) were estimated to be almost $20 million for the 1989-90 ski season.

- Non-resident skier expenditures generated an estimated $160 million in personal income for Utah wage earners and proprietors (taking into account direct, indirect and induced effects); and generated approximately 13,000 year-round equivalent jobs (full and part time) for Utah workers.

Non-resident Skier Economic Impact Analysis

The total impact of non-resident skiers on the Utah economy was inferred by means of a 531-sector input-output model of the Utah economy developed by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce. This model is a member of the RIMS II class of economic models, whose characteristics and applicability are documented in two BEA publications.[1] In effect this model allows the flow of non-resident skier expenditures to be traced throughout the Utah economy, and the total amount of output from each industrial sector to be estimated. The model takes into account not only the direct requirements from each sector the non-resident skiers make purchases from, but also the indirect requirements that are imposed because those sectors must make purchases from other sectors to satisfy the direct requirements, and also the induced requirements imposed on the economy because the workers in each of the sectors directly or indirectly impacted will be making purchases from those and still other sectors in the economy out of the income they receive for providing labor services.

Table 1 on page 9 sets forth the framework for the calculation of the non-resident skier impact on the Utah economy. The numbers in the non-resident expenditures column were generally derived by expanding the mean expenditures per skier visit (i.e., per skier day) calculated from the 1989-90 skier survey. In the case of air transportation expenditures, the number of non-resident trips taken by airline was estimated by dividing the total number of skier visits accounted for by airline travelers (approximately 76% of total non-resident skier visits) by the average number of days skied by those traveling by airline. The estimated total number of trips taken by airline was then multiplied by the mean airfare reported by non-resident skiers to arrive at the estimated total air transportation expenditures of non-resident skiers.

For most other expenditure categories the total number of non-resident skier visits accounted for by skiers age 16 and over was estimated by multiplying the estimated total non-resident skier visits by the estimated proportion of non-resident skiers age 16 and over. The estimated total number of non-resident skier visits accounted for by skiers age 16 and over was then multiplied by the mean expenditure per skier visit for skiers age 16 and over. This procedure implicitly assumes that all non-resident expenditures were accounted for by non-resident skiers age 16 and over, i.e., that older skiers (parents and older relatives, for example) reported expenditures made on behalf of the younger skiers, who were not interviewed.

In the case of lodging, the mean expenditure per skier visit was first multiplied by the ratio of average number of nights spent in Utah to average number of days skied, before multiplying by the estimated total number of non-resident skier days to reflect the fact that the average number of nights spent in Utah exceeded the average number of skier days. Estimated ski lift expenditures were constrained to reflect the actual structure of resort-specific lift pass prices available to non-resident skiers. A similar adjustment was made in the case of ski lesson expenditures.

The trade and transportation margin percentages shown in the wholesale margin, retail margin and freight margin columns of Table 1 were derived from a table obtained from the Interindustry Economics Division of the Bureau of Economic Analysis entitled "Table B.--Detailed Input-Output Commodity Composition of Personal Consumption Expenditures, 1977," which is an expanded version of a Table B that was published in the May 1984 issue of the *Survey of Current Business*.[2] These margin percentages were multiplied by the numbers shown in the non-resident expenditures column to obtain the Utah trade and transportation requirements shown in the wholesale requirement, retail requirement and freight requirement columns, respectively. These requirements have been aggregated to obtain the totals shown as the final number in each of those columns.

The entries in the production requirement column represent the estimated value of the output of Utah firms directly required to support the level of expenditures shown in the non-resident expenditures column. In most cases the entry in the production requirement column is obtained by subtracting estimated excise taxes from the corresponding entries in the non-resident expenditures column. In the cases of lodging (room only) and automobile rental, the survey mean expenditure values were presumably

exclusive of excise taxes, so that the corresponding entries in the two columns are the same. That is also true in the case of ski lessons and other services, since most services are exempt from the state sales tax. In the case of air transportation the 8% federal excise tax was first deducted, then an allowance for airline overhead was deducted, after which half of the remainder was allocated as the production requirement for Utah.

For those expenditures involving retail trade purchases, it was assumed that except for non-restaurant food and beverages and for gasoline and oil, the only direct Utah production requirements were the retail trade margin requirements, wholesale trade margin requirements and freight margin requirements. In the case of non-restaurant food and beverages, it was assumed that there was an additional direct production requirement from the Utah food and beverage processing sectors, based on the estimated percent of total Utah processed food and beverage consumption produced in Utah. The same approach was used to estimate the additional Utah refined petroleum requirement using data provided by the Utah Energy Office. Finally, half of the derived freight requirement was allocated as a production requirement from the Utah freight transportation sectors.

The entries in the total income coefficient column were generally taken directly from the 531-sector BEA input-output model of the Utah economy. In some cases the coefficients in the model were averaged over several Input-Output model sectors because the expenditure category was broader than the sectors of the model. The entries in the total income generated column were derived by simply taking the product of the entries in the production requirement and total income coefficient columns. The sum of the entries in the total income generated column reflect the total estimated Utah wage and salary and proprietors' income generated by non-resident skier expenditures—taking into account the indirect and induced effects of the non-resident expenditures, as well as the direct effect.

The entries in the penultimate column of Table 1 were also derived from coefficients in the 531-sector BEA input-output model, again using averaging as appropriate. It was also necessary to adjust the model coefficients downward to account for price inflation between 1986 and 1990, since the amount of labor that can be purchased by a given amount of dollars will vary directly with the value of the dollar. The numbers in this column are shown in scientific notation in order to avoid the large number of leading zeros after the decimal point.

Finally, the entries in the final or total jobs generated column of Table 1 were obtained by multiplying the entries in the production requirement column by the respective entries in the total jobs coefficient column. The sum of the entries in the total jobs generated column represents the estimated total number of year-round full and part-time jobs generated in the Utah economy by non-resident skier expenditures—again taking into account indirect and induced effects, as well as the direct effects of the non-resident expenditures.

The result of this input-output analysis of the effects of non-resident skier expenditures is to come up with a bottom line, in which there is no double counting, and which represents a true measure of the economic benefit conferred on Utah residents as a consequence of sales made by Utah businesses to non-resident skiers. The bottom line is that non-resident skier expenditures generate an estimated 13,000 year-round full and part-time jobs in the Utah economy and that these workers receive an estimated $160 million in personal income for their efforts.

Endnotes

1. See *Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II)* (U.S. Department of Commerce, Bureau of Economic Analysis, May 1986) and *Regional Input-Output Modeling System (RIMS II): Estimation, Evaluation, and Application of a Disaggregated Regional Impact Model* (U.S. Department of Commerce, Bureau of Economic Analysis, 1981).

2. See "Input-Output Structure of the U.S. Economy, 1977," *Survey of Current Business*, Vol. 64, No. 5 (May 1984). The relevant table is entitled "Table B.--Input-Output Commodity Composition of Personal Consumption Expenditures, in Producers' and Purchasers' Prices, 1977" and appears on pages 46-48.

TABLE 1

CALCULATION OF UTAH NON-RESIDENT SKIER TOTAL ECONOMIC IMPACT DURING THE 1989-90 SKI SEASON

Expenditure Category	Non-resident Expenditures	Wholesale Margin	Retail Margin	Freight Margin	Wholesale Requirement	Retail Requirement	Freight Requirement	Production Requirement	Total Income Coefficient	Total Income Generated	Total Jobs Coefficient	Total Jobs Generated
Air Transportation	76,634,702							$29,167,310	0.5735	$16,727,452	2.44E-05	712
Ski Lift Passes	34,486,880							32,306,211	0.6197	20,020,159	4.98E-05	1,610
Ski Equipment Rentals	6,515,920							6,118,235	0.5170	3,163,127	3.01E-05	184
Ski Lessons	6,745,517							6,745,517	0.8683	5,857,133	4.94E-05	333
Lodging, Room Only	87,006,055							87,006,055	0.6433	55,970,995	5.11E-05	4,448
Lodging Incidentals	4,236,471							3,977,907	0.6433	2,558,988	5.11E-05	203
Restaurants	44,995,933							42,249,702	0.6019	25,430,096	5.60E-05	2,366
Other Food & Beverages	17,159,985	9.91%	22.78%	2.40%	1,700,555	3,909,045	411,840	1,670,782	0.4139	691,537	2.86E-05	48
Ski Equipment & Apparel	18,306,791	7.59%	30.10%	0.70%	1,389,485	5,510,344	128,148					
Other Apparel & Footwear	4,818,806	3.79%	44.76%	0.30%	182,633	2,156,897	14,456					
Jewelry, Souvenirs, Gifts	9,744,789	12.14%	36.37%	0.10%	1,183,017	3,544,180	9,745					
Other Retail Purchases	1,597,975	14.10%	26.80%	1.00%	225,314	428,257	15,980					
Entertainment & Amusement	1,876,893							1,762,341	0.6863	1,209,495	5.40E-05	95
Automobile Rental	13,101,761							13,101,761	0.4500	5,895,793	2.48E-05	325
Gasoline & Oil	3,929,610	15.26%	15.17%	2.20%	599,658	596,122	86,451	1,395,168	0.1787	249,317	7.53E-06	11
Other Transportation Costs	2,013,673							1,888,113	0.7790	1,470,840	3.23E-05	61
Other Services	2,011,887							2,011,887	0.8140	1,637,575	7.07E-05	142
Other Miscellaneous	2,609,915							2,450,625	0.5789	1,418,735	4.18E-05	102
Total Wholesale Requirement					5,280,663			5,280,663	0.6698	3,536,988	3.04E-04	1,605
Total Retail Requirement						16,144,845		16,144,845	0.7779	12,559,075	5.18E-05	836
Total Freight Requirement							666,620	333,310	0.8118	270,581	3.47E-05	12
TOTALS	$337,793,564							$253,610,432		$158,667,884		13,093

Source: Estimated by BEBR on the basis of data obtained from the BEBR 1989-90 Utah Skier Survey in conjunction with input-output model coefficients inferred from a RIMS II 531-sector model of the Utah economy developed by the U.S. Department of Commerce, Bureau of Economic Analysis (based upon 1986 regional data).

Utah Business Statistics

UTAH DATA	Apr. 1989	Apr. 1990	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.)	22,061	NA	NA	NA	21,113	NA
New Corporations (no.)	468	501	7.1%	483	450	7.4%
New Car, Truck, and Motor Home Sales (no.)	5,815	NA	NA	NA	5,125	NA
Agriculture						
Average Prices Recorded by Farmers (dol.)						
Beef Steers and Heifers (cwt) (thous.)	72.90	78.60	7.8%	73.55	70.08	5.0%
Lambs (cwt)	59.60	51.30	-13.9%	58.08	60.60	-4.2%
Milk Wholesale (cwt)	11.40	12.50	9.6%	13.11	11.78	11.2%
Alfalfa Hay, Baled (per ton)	85.00	86.00	1.2%	84.75	79.33	6.8%
Cattle Slaughtered (live weight) (thous. of lbs.)	43,532	43,627	0.2%	47,967	46,757	2.6%
Construction						
Total Construction (thous. of dol.) 1	86,854.2	87,542.2	0.8%	78,329.9	68,515.4	14.3%
Residential	39,593.7	45,966.6	16.1%	39,097.1	33,392.4	17.1%
Nonresidential	30,211.6	25,462.8	-15.7%	23,481.0	22,281.0	5.4%
Additions, Alterations, and Conversions	17,048.9	16,112.7	-5.5%	15,751.9	12,842.0	22.7%
Total Permit Construction (thous. of dol.) 2	94,589.0	107,480.3	13.6%	84,698.0	74,017.8	14.4%
Residential	44,850.1	49,810.4	11.1%	40,434.6	34,927.8	15.8%
Nonresidential	32,561.4	38,370.2	17.8%	29,952.9	25,152.2	19.1%
Additions, Alterations, and Repairs	17,177.5	19,299.7	12.4%	14,310.5	13,937.7	2.7%
New Dwelling Units (no.)	544	631	16.0%	505	472	7.0%
Employment						
Civilian Labor Force (thous.)	777.5	787.2	1.2%	792.4	767.1	3.3%
Total Employed Persons	733.7	745.9	1.7%	758.7	730.8	3.8%
Unemployed Persons	43.8	41.3	-5.7%	33.7	36.0	-6.4%
Percent Total Labor Force	5.6	5.2	-7.1%	4.3	4.7	-10.2%
Employees on Nonagricultural Payrolls (thous. of jobs)	683.5	715.3	4.7%	699.9	669.8	4.5%
Manufacturing	101.3	104.5	3.2%	103.6	100.7	2.9%
Mining	7.8	8.6	10.3%	8.3	8.0	3.9%
Contract Construction	24.8	25.5	2.8%	26.3	25.3	4.2%
Transportation, Communication, and Utilities	40.2	42.4	5.5%	41.6	40.1	3.6%
Wholesale Trade	37.8	39.9	5.6%	38.8	36.5	6.3%
Retail Trade	123.5	131.6	6.6%	130.2	122.8	6.0%
Finance, Insurance, and Real Estate	33.2	33.8	1.8%	33.4	33.2	0.5%
Services 3	165.7	177.1	6.9%	170.6	159.4	7.0%
Federal Government	40.6	41.1	1.2%	40.2	39.5	1.7%
State Government 4	40.6	42.4	4.4%	40.8	39.0	4.6%
Local Government 4	67.9	68.7	1.2%	66.2	65.2	1.5%
Average Weekly Hours						
Manufacturing	39.9	39.2	-1.8%	39.9	40.4	-1.2%
Mining	41.2	42.8	3.9%	41.5	40.6	2.2%
Wholesale Trade	38.4	37.9	-1.3%	36.1	37.6	-4.1%
Retail Trade	27.2	26.6	-2.2%	27.0	27.6	-1.9%
Amount of Unemployment Compensation (thous. of dol.)	5,164.4	5,334.5	3.3%	4,919.0	5,421.1	-9.3%
Finance						
Savings, Savings and Loan Association (mil. of dol.)	2,191.7	1,856.5	-15.3%	2,076.5	2,351.0	-11.7%
Tax Collections by the State of Utah (thous. of dol.)						
Total Tax Collections	167,403.7	385,489.7	130.3%	178,558.3	149,602.3	19.4%
Sales and Use Tax	19,201.4	158,215.0	724.0%	69,201.8	54,799.2	26.3%
Motor Fuel Tax	9,186.4	10,488.1	14.2%	11,720.5	10,984.5	6.7%
Individual Income Tax	99,278.0	129,618.7	30.6%	56,051.2	52,850.6	6.1%
Corporation Franchise Tax	23,114.6	21,954.8	-5.0%	4,623.4	7,398.9	-37.5%
Production						
Crude Oil to Refineries (thous. of bbls.)	4,460.5	3,414.8	-23.4%	3,643.4	4,387.2	-17.0%
Crude Oil (thous. of bbls.)	2,293.4	2,285.4	-0.3%	2,335.4	2,602.9	-10.3%
Natural Gas (mil. of cu. ft.)	21,410.4	23,773.5	11.0%	23,701.7	22,996.8	3.1%
Coal (thous. short tons)	1,525.0	1,899.0	24.5%	1,821.5	1,527.3	19.3%
Tourism/Travel						
Air Passengers (total no. on and off)(S.L. Int'l Airport)	879,527	887,484	0.9%	1,004,423	899,653	11.6%
Highway Traffic Count Across State Lines	38,156	NA	NA	NA	NA	NA
Transient Room Taxes (thous. of dol.)	189.7	1,036.3	446.3%	634.9	595.9	6.5%
Visits, State, Nat'l. Parks, Monuments (thous.)	925.2	1,051.6	13.7%	1,126.0	1,102.3	2.1%
Utilities						
Telephone Lines in Service (Mt. Bell)(Residential)	498,357	NA	NA	NA	492,065	NA
Telephone Lines in Service (Mt. Bell)(Nonresidential)	185,010	NA	NA	NA	182,852	NA
Electric Customers (Residential)	482,084	489,155	1.5%	486,031	478,875	1.5%
Electric Customers (Commercial)	47,898	49,872	4.1%	48,815	47,287	3.2%
Natural Gas Customers (Residential & Commercial)	473,794	487,876	3.0%	477,804	463,050	3.2%
Natural Gas Customers (Industrial)	567	569	0.4%	567	554	2.3%

Utah Business Statistics

UTAH DATA	Apr. 1989	Apr. 1990	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Davis County						
Non-Ag. Employment (thous.)	55.4r	58.1f	4.9%	56.3	54.2	3.9%
Unemployment Rate	4.4r	4.1	-6.8%	4.0	4.3	-7.9%
Auth. Permit Construction (thous. of dol.)	11,978.5	9,944.8	-17.0%	10,575.5	8,449.6	25.2%
New Dwelling Units (no.)	76	88	15.8%	75	65	14.3%
Postal Receipts (thous. of dol.)	488.5	560.4	14.7%	643.0	477.3	34.7%
Electric Customers (Residential)	48,998	49,741	1.5%	49,414	48,355	2.2%
Electric Customers (Commercial)	3,786	3,636	-4.0%	3,650	3,549	2.8%
Natural Gas Customers (Residential)	51,777	53,073	2.5%	52,197	50,907	2.5%
Natural Gas Customers (Industrial)	56	56	0.0%	56	54	4.4%
Telephone Lines in Service (Mt. Bell)(Residential)	56,617	NA	NA	NA	55,818	NA
Telephone Lines in Service (Mt. Bell)(Nonresidential)	11,825	NA	NA	NA	11,560	NA
Salt Lake County						
Non-Ag. Employment (thous.)	348.7r	363.5f	4.2%	359.1	343.9	4.4%
Unemployment Rate	4.9r	4.3	-12.2%	3.9	4.3	-11.0%
Auth. Permit Construction (thous. of dol.)	33,800.4	46,623.7	37.9%	35,677.8	32,142.0	11.0%
New Dwelling Units (no.)	195	276	41.5%	180	181	-0.5%
Postal Receipts (thous. of dol.)	8,744.7	8,012.6	-8.4%	8,124.2	8,304.2	-2.2%
Electric Customers (Residential)	242,424	245,843	1.4%	244,234	240,900	1.4%
Electric Customers (Commercial)	20,835	21,169	1.6%	21,008	20,599	2.0%
Natural Gas Customers (Residential)	225,738	229,399	1.6%	225,906	221,890	1.8%
Natural Gas Customers (Industrial)	241	244	1.2%	245	238	2.9%
Telephone Lines in Service (Mt. Bell)(Residential)	234,075	NA	NA	NA	231,682	NA
Telephone Lines in Service (Mt. Bell)(Nonresidential)	112,129	NA	NA	NA	111,611	NA
Utah County						
Non-Ag. Employment (thous.)	86.0r	91.5f	6.4%	87.8	83.3	5.3%
Unemployment Rate	4.5r	3.7	-17.8%	3.8	4.1	-6.1%
Auth. Permit Construction (thous. of dol.)	16,592.2	17,311.7	4.3%	12,473.5	11,877.8	5.0%
New Dwelling Units (no.)	77	89	15.6%	79	69	14.5%
Postal Receipts (thous. of dol.)	1,373.0	1,863.2	35.7%	1,565.8	1,297.0	20.7%
Electric Customers (Residential)	52,701	53,448	1.4%	53,301	52,613	1.3%
Electric Customers (Commercial)	5,907	7,284	23.3%	6,592	5,995	9.9%
Natural Gas Customers (Residential)	63,711	64,886	1.8%	63,528	62,145	2.2%
Natural Gas Customers (Industrial)	74	74	0.0%	73	70	4.9%
Telephone Lines in Service (Mt. Bell)(Residential)	66,471	NA	NA	NA	65,271	NA
Telephone Lines in Service (Mt. Bell)(Nonresidential)	21,258	NA	NA	NA	20,635	NA
Weber County						
Non-Ag. Employment (thous.)	64.6r	67.3f	4.2%	65.5	63.0	4.0%
Unemployment Rate	5.3r	5.1	-3.8%	5.0	5.7	-11.2%
Auth. Permit Construction (thous. of dol.)	8,803.3	4,739.3	-46.2%	6,453.8	5,237.6	23.2%
New Dwelling Units (no.)	77	34	-55.8%	44	44	0.4%
Postal Receipts (thous. of dol.)	733.2	691.9	-5.6%	701.9	686.3	2.3%
Electric Customers (Residential)	54,240	54,752	0.9%	54,401	53,778	1.2%
Electric Customers (Commercial)	5,056	5,135	1.6%	5,048	4,963	1.7%
Natural Gas Customers (Residential)	50,761	51,688	1.8%	50,813	50,078	1.5%
Natural Gas Customers (Industrial)	86	83	-3.5%	84	83	1.0%
Telephone Lines in Service (Mt. Bell)(Residential)	47,267	NA	NA	NA	46,795	NA
Telephone Lines in Service (Mt. Bell)(Nonresidential)	12,200	NA	NA	NA	12,075	NA

1 Obtained from U.S. Bureau of the Census Construction Statistics Division.
2 Obtained from *Utah Construction Report*.
3 Includes services by nonprofit and religious organizations.
4 Includes public schools and college institutions.

NA Not Available
r Revised
f Forecast

Sources:

Personal Income	U.S. Department of Commerce, Bureau of Economic Analysis.
New Corporations	Utah Secretary of State.
New Car and Truck Sales	Utah State Tax Commission, Economic and Statistical Unit.
Agriculture	U.S. Department of Agriculture, Utah Agricultural Statistics Service, *Utah Agriculture*.
Construction Data	U.S. Bureau of the Census and Bureau of Economic and Business Research, *Utah Construction Report*.
Employment Data	Utah Department of Employment Security.
Savings Information	Utah Savings and Loan Institutions.
Tax Collections	Utah State Tax Commission.
Crude Oil Production	Utah Department of Oil, Gas, and Mining and Area Oil Refineries.
Natural Gas Production	Utah Department of Oil, Gas, and Mining.
Coal Production	U.S. Department of Energy.
Air Passengers	Salt Lake City International Airport, Statistics Division.
Highway Traffic Count	Utah Department of Transportation.
Visits to State and National Parks and Monuments	U.S. Forest Service, Utah State Parks and Recreation Department.
Utilities Data	Cooperating Utah Utility Companies.
Postal Receipts	Postmasters in Davis, Salt Lake, Utah, and Weber Counties.

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NATIONAL DATA	Apr. 1989	Apr. 1990	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
U.S. Gross National Product (seasonally adjusted) (bil.) (qtly.)	5,174.0	5,451.6	5.4%	5,292.5	4,993.7	6.0%
Total Personal Income (seasonally adjusted) (bil. of dol.)	4,387.1	4,686.8	6.8%	4,532.5	4,188.4	8.2%
Industrial Production Indexes (seasonally adjusted) (1987=100)	108.6	109.0	0.4%	108.3	106.7	1.4%
New Plant and Equipment Expenditures by Business (bil.) (qtly.)	470.9	500.3	6.2%	488.2	444.8	9.8%
Net Exports of Goods and Services (bil.) (qtly.)	-50.6	NA	NA	NA	-64.5	NA
Exports of Goods and Services (bil.) (qtly.)	626.1	NA	NA	NA	576.5	NA
Imports of Goods and Services (bil.) (qtly.)	676.6	NA	NA	NA	640.9	NA
Index of Leading Indicators (1982=100)	145.8	145.1	-0.5%	144.7	144.3	0.2%
Price Indexes						
Consumer Price Indexes (not seasonally adjusted) (1982-84=100)						
CPI-U (All Urban Consumers) All Items	123.1	128.9	4.7%	126.0	120.2	4.9%
CPI-U (All Urban Consumers) Food & Beverages	124.0	131.0	5.6%	127.5	120.5	5.8%
CPI-U (All Urban Consumers) Housing	121.6	126.8	4.3%	124.7	119.9	4.0%
CPI-U (All Urban Consumers) Transportation	114.6	117.3	2.4%	115.7	110.5	4.7%
CPI-U (All Urban Consumers) Medical Care	146.8	159.8	8.9%	153.4	141.9	8.1%
CPI-U (All Urban Consumers) Energy	94.9	95.7	0.8%	96.1	90.5	6.2%
Producer Price Index (not seasonally adjusted) (1982=100)						
Producer Price Index, All Finished Goods	113.0	117.0	3.5%	115.2	109.9	4.9%
GNP Price Deflator (1982=100) (qtly.)	125.9	129.6	2.9%	127.9	123.0	4.0%
Civilian Employment (seasonally adjusted)						
Total Civilian Labor Force (mil.)	123.6	124.9	1.1%	124.3	122.4	1.5%
Total Civilian Employment (mil.)	117.1	118.1	0.9%	117.7	115.8	1.6%
Unemployment Rate	5.3	5.4	1.9%	5.3	5.4	-1.2%
Construction						
Total Construction (mil. of dol.)	24,134.4	20,160.2	-16.5%	20,760.3	21,844.2	-5.0%
Residential	11,466.0	9,721.7	-15.2%	9,683.2	10,256.9	-5.6%
Nonresidential	7,482.3	6,380.9	-14.7%	7,320.5	7,590.1	-3.6%
Non-Building	5,186.1	4,057.6	-21.8%	3,756.6	3,997.2	-6.0%
New Dwelling Units (no.)	131,488	106,781	-18.8%	107,724	120,947	-10.9%
Interest Rates						
Federal Funds Rate	9.84	8.26	-16.1%	8.79	8.51	3.2%
Short Term (3-month Treasury bill rate)	8.70	7.78	-10.6%	7.85	7.60	3.3%
Long Term (30-year Treasury bond yields)	9.18	8.92	-2.8%	8.42	9.14	-7.9%
Prime Rates Charged by Banks on Short-term Business Loans (avg.)	11.50	10.00	-13.0%	10.51	10.16	3.5%
Mortgage Rates (new homes)	9.88	9.83	-0.5%	9.80	9.08	8.0%

Sources: *Survey of Current Business*, U.S. Department of Commerce: U.S. Gross National Product, Total Personal Income, Industrial Production Indexes, New Plant and Equipment Expenditures by Business, Export/Import Data, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates.

F.W. Dodge Report, McGraw-Hill: National Construction Data.

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Index.

Chase N. Peterson, *President, University of Utah*
John Seybolt, *Dean, Graduate School of Business*

BUREAU OF ECONOMIC AND BUSINESS RESEARCH

R. Thayne Robson, Director
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